LZ SERIES ▪ ULTRA LOW IMPEDANCE 105°C TYPE

KEY FEATURES

LOW IMPEDANCE

- **ALUMINUM ELECTROLYTIC CAPACITOR** ▪ THT type
- Endurance: 105°C ▪ 2 000 hours
- Ultra low impedance
- Highest ripple current in small size
- Ideal for output filter applications

HF Halogen Free

RoHS & REACH COMPLIANT

SPECIFICATIONS

Items		Performance Characteristics				
Operating Temperature Range		-40 ~ +105°C				
Rated Voltage Range	V_R	6.3 ~ 25V DC				
Surge Voltage	V_S	$V_S = 1.15 \cdot V_R$				
Capacitance Range	C_R	220 ~ 3300µF				
Cap. Tolerance	ΔC	±20% (120Hz ▪ 20°C)				
Leakage Current (20°C ▪ V_R applied)	I_{LEAK}	≤ $0.01 \cdot C_R \cdot V_R$ or 3µA, whichever is greater ▪ After 2 minutes [I_{LEAK} (µA) ; C_R (µF) ; V_R (V)]				
Dissipation Factor % (20°C ▪ 120Hz)	tanδ	V_R (V DC)	6.3	10	16	25
		tanδ (%)	14	12	10	9
		For C_R > 1000µF, add 2% per every multiple 1000µF of rated capacitance value				
Low Temperature Characteristics at 120Hz	Z ratio max.	V_R (V DC)	6.3	10	16	25
		Z-25°C/Z+20°C	4	3	2	2
		Z-40°C/Z+20°C	6	4	3	3
		For capacitance > 1000µF				
		Z-25°C/Z+20°C	Add 0.5 for every multiple 1000µF of rated capacitance value			
		Z-40°C/Z+20°C	Add 1 for every multiple 1000µF of rated capacitance value			

Lifetime Test		
Endurance 105°C (V_R & I_R applied)	Test	**2 000 hours**
	△C/C_R	≤ ±25% of initial measured value
	tanδ	≤ 200% of initial specified value
	I_{Leak}	≤ the initial specified value
Shelf Life 105°C (V_R = 0)	Test	**1 000 hours**
	△C/C_R	≤ ±25% of initial measured value
	tanδ	≤ 200% of initial specified value
	I_{Leak}	≤ the initial specified value
	Before measurement: Restore capacitor to 20°C, apply V_R for 30 min according JIS-C-5101-4	

MULTIPLIER K_f for RIPPLE CURRENT vs. FREQUENCY

C_R (µF) / Frequency (Hz)	100/120	1k	10k	100k
220 ~ 330	0.4	0.75	0.93	1
390 ~ 1000	0.5	0.85	0.95	1
1200 ~ 3300	0.55	0.9	0.98	1

For further information please contact sales@capxon.org

STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
6.3	560	8	11,5	38	1080	LZ561M6R3F115ETD
	680	8	11,5	38	1080	LZ681M6R3F115ETD
	820	8	11,5	38	1080	LZ821M6R3F115ETD
	1000	8	16	36	1100	LZ102M6R3F160ETD
	1000	10	12,5	27	1500	LZ102M6R3G125ETA
	1200	8	16	29	1450	LZ122M6R3F160ETD
	1500	8	20	20	1850	LZ152M6R3F200ETD
	1500	10	12,5	27	1500	LZ152M6R3G125ETA
	1800	10	16	18	1910	LZ182M6R3G160ETA
	2200	8	20	20	1850	LZ222M6R3F200ETD
	2200	10	16	18	1910	LZ222M6R3G160ETA
	2700	10	20	13	2540	LZ272M6R3G200ETA
	3300	10	30	12	2800	LZ332M6R3G300ETA
10	470	8	11,5	38	1080	LZ471M010F115ETD
	560	8	11,5	38	1080	LZ561M010F115ETD
	680	8	11,5	38	1080	LZ681M010F115ETD
	680	10	12,5	27	1500	LZ681M010G125ETA
	820	10	12,5	29	1450	LZ821M010G125ETA
	1000	8	16	29	1450	LZ102M010F160ETD
	1000	10	12,5	27	1500	LZ102M010G125ETA
	1200	8	20	20	1850	LZ122M010F200ETD
	1500	8	20	20	1850	LZ152M010F200ETD
	1500	10	16	18	1910	LZ152M010G160ETA
	1800	10	20	16	2540	LZ182M010G200ETA
	2200	10	20	15	2540	LZ222M010G200ETA
	2200	10	25	14	2800	LZ222M010G250ETA
16	330	8	11,5	38	1080	LZ331M016F115ETD
	470	8	11,5	38	1080	LZ471M016F115ETD
	470	10	12,5	27	1500	LZ471M016G125ETA
	560	8	16	29	1450	LZ561M016F160ETD
	680	8	16	29	1450	LZ681M016F160ETD
	680	10	12,5	27	1500	LZ681M016G125ETA
	820	8	20	20	1850	LZ821M016F200ETD
	1000	8	20	20	1850	LZ102M016F200ETD
	1000	10	16	18	1910	LZ102M016G160ETA
	1200	10	20	17	2540	LZ122M016G200ETA
	1500	10	20	15	2540	LZ152M016G200ETA
	1800	10	25	13	2800	LZ182M016G250ETA

See "PACKAGING INFORMATION" to taped or formed products.

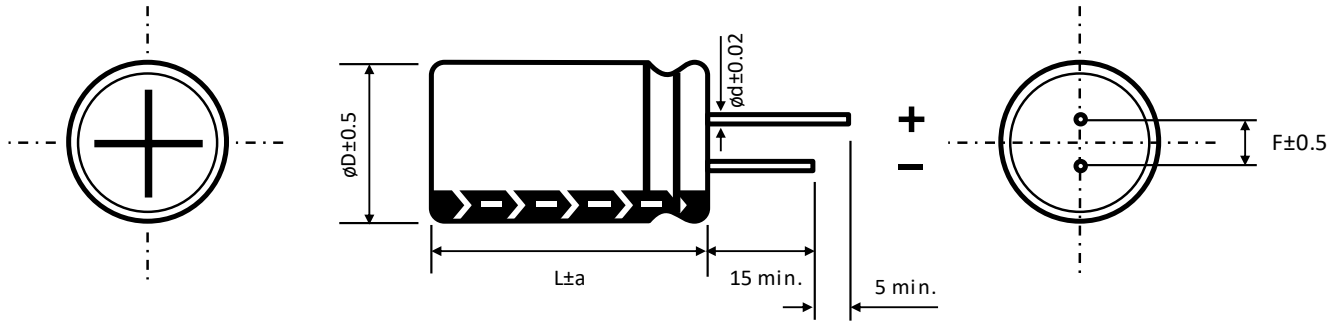
STANDARD RATINGS

Part number shows bulk version with straight leads

V_R (V)	C_R (µF)	ø D (mm)	L (mm)	Z ▪ Max. Impedance +20°C ▪ 100kHz (mΩ)	I_R ▪ Max. Ripple Current +105°C ▪ 100kHz (mA rms)	CapXon Part Number
25	220	8	11,5	32	1080	LZ221M025F115ETD
	270	8	11,5	31	1150	LZ271M025F115ETD
	330	8	11,5	29	1450	LZ331M025F115ETD
	330	10	12,5	27	1650	LZ331M025G125ETA
	470	8	20	20	1720	LZ471M025F200ETD
	470	10	12,5	25	1700	LZ471M025G125ETA
	470	10	16	22	1830	LZ471M025G160ETA
	560	10	16	21	1850	LZ561M025G160ETA
	680	8	20	18	1820	LZ681M025F200ETD
	680	10	16	20	1920	LZ681M025G160ETA
	680	10	20	18	2060	LZ681M025G200ETA
	1000	10	20	16	2180	LZ102M025G200ETA

See "PACKAGING INFORMATION" to taped or formed products.

DIMENSIONS ▪ All dimensions in mm



ø D	8		10
F	3.5		5
ø d	L < 20	L ≥ 20	0.6
	0.5	0.6	
α	1.5		1.5

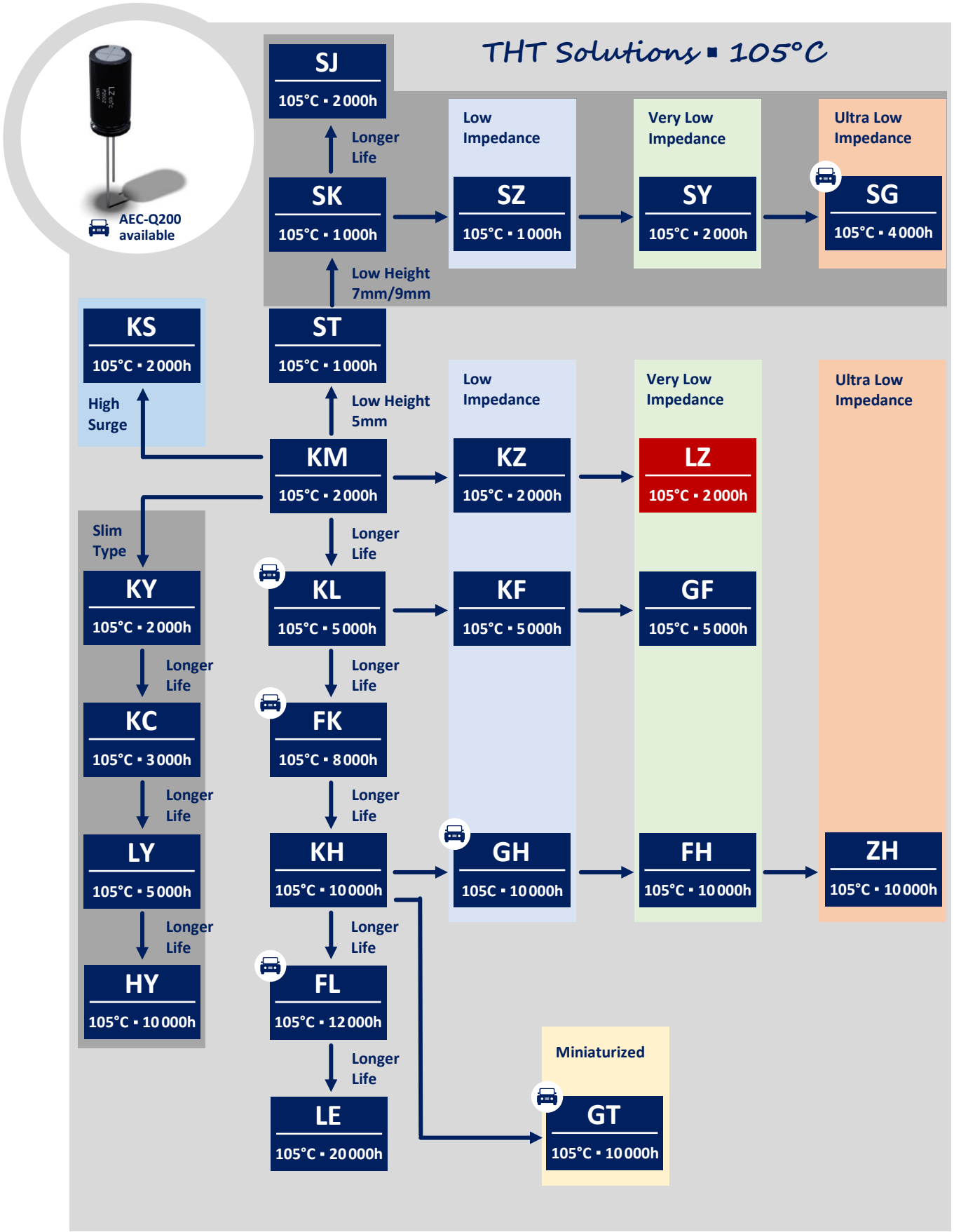
PRECAUTIONS, GUIDELINES AND PACKAGING INFORMATION

Unless otherwise agreed in individual specifications, all products are subject to our "General Precautions and Guidelines" as well as our "Packaging Information". Please refer to the following links in the table.

General Precautions & Guidelines	Packaging Information	3D Models	Reliability Tests

For further information please contact sales@capxon.org

GROUP CHART


AEC-Q200 available
THT Solutions ▪ 105°C
SJ
105°C ▪ 2000h
Longer Life
SK
105°C ▪ 1000h
Low Height 7mm/9mm
ST
105°C ▪ 1000h
Low Impedance
SZ
105°C ▪ 1000h
Very Low Impedance
SY
105°C ▪ 2000h
Ultra Low Impedance
SG
105°C ▪ 4000h
KS
105°C ▪ 2000h
High Surge
Low Height 5mm
KM
105°C ▪ 2000h
KZ
105°C ▪ 2000h
LZ
105°C ▪ 2000h
Slim Type
KY
105°C ▪ 2000h
KL
105°C ▪ 5000h
KF
105°C ▪ 5000h
GF
105°C ▪ 5000h
KC
105°C ▪ 3000h
FK
105°C ▪ 8000h
LY
105°C ▪ 5000h
KH
105°C ▪ 10000h
GH
105C ▪ 10000h
FH
105°C ▪ 10000h
ZH
105°C ▪ 10000h
HY
105°C ▪ 10000h
FL
105°C ▪ 12000h
LE
105°C ▪ 20000h
Miniaturized
GT
105°C ▪ 10000h

DISCLAIMER

All product related data (e.g. specification, statements and general information) are subject to change without any notice. It is necessary that the customer observes all product related technical / application information and handling instructions.

CapXon products are designed and manufactured according to severe quality and safety standards. Under no circumstance, CapXon warrants that any CapXon product is suitable for the purposes intended for your application, even CapXon knows the application. It is customer's duty and obligation to check and make sure that CapXon products are suitable for the purposes intended and select the correct and proper CapXon product. Customers are requested to perform a sufficient validation and reliability evaluation to assure needed safety level and reliability performance by suitable designs and to apply proper safeguards (e.g. redundancies, protective circuits).

Particular operating conditions (ambient temperature, ripple current, voltage, thermal resistance, etc.) as well as storage, production or assembly may affect the performance and the lifetime of the capacitor. Please consult CapXon for lifetime estimation, failure mode considerations or worst-case scenarios according to the product technology, product tolerances / deviations or change of the characteristics of the capacitor due to shipment, storage, handling, production and usage.

For aerospace or military application, life-saving, life-sustaining, safety critical applications or any application where failure may cause severe personal injury or death, please consult us before design-in the capacitor in your application.

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